

285<sup>th</sup> OMICS International Conference

# Global Healthcare & Fitness Summit

July 20-22, 2015 San Francisco, USA

## Influence of soy protein intake on blood isoflavone levels, thyroid and sex hormone concentrations in women

**Sadaf Koohkan**

University of Freiburg, Germany

There is a current discussion about the hormonal impact of soy isoflavones in food on circulating of thyroid and sex hormones in women. While official statements argue the hormonal side effects, weight loss ads recommend an increased energy output induced by changes in hormonal regulation after soy intake. To describe the possible influence of intake of a commercially available soy-yogurt-honey product (Almased®) used for weight reduction and metabolic functions improvement, 14 non-obese, euthyroid postmenopausal women ( $64.2 \pm 6.3$  years;  $24.4 \pm 3.2$  kg/m<sup>2</sup>) were examined over a period of 8 weeks consuming a standardized amount of the product (25 -125 g/d). The amount of soy-protein-isolate of the product was 44.2 % and the content of biologically available isoflavonoids was 1.45 mg/g powder. Blood sample were drawn to analyze blood ISF levels (genistein, daidzein, glycitein, o-DMA, equol) by a LCMS method as well as basal TSH, fT3 and fT4. Estradiol, progesterone, testosterone and DHEA were also examined. Despite the significant increases in blood ISF concentrations after all intake periods, the baseline levels of all thyroid and sex hormones was stayed within the normal range during the intervention and even after a daily intake of 125 g. ISF, e.g., genistein rose from  $3.8 \pm 1.9$  ng/ml to  $519.2 \pm 382.7$  ng/ml. Results showed that the daily intake of 25-125 gram of the tested product significantly increased the blood ISF levels. It can be assumed that at this amount of ISF intake, the supplement used had no specific influence particularly negative side effects on thyroid and sex hormones in postmenopausal women.

### Biography

Sadaf Koohkan has completed her MSc at London Metropolitan University in "Nutrition Science (Public health/Sport)" and her PhD on "Nutrition, Diet therapy and Lifestyle in overweight adults" at Albert-Ludwigs University of Freiburg at the age of 33. She is working as Research Assistant and study Coordinator for ACOOHR Multicenter study in Institute for Preventive Medicine (IPM), Germany.

[sadaf60k@gmail.com](mailto:sadaf60k@gmail.com)

### Notes: